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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/767,699
Filing Date: January 29, 2004
Appellant(s): DALEY ET AL.

Ruth J. Ma (Reg. No. 55,414)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 27, 2009 appealing from the Office action mailed July 22, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is not correct.

The appellant filed appeal brief on 05/22/2009 without addressing rejection of claims 10-18 under 35 U.S.C. 101 in the Final Rejection mailed on 07/22/2009. Examiner issued Notification of Non-Compliant Appeal Brief to the appellant on 07/29/2009 with request to address the 101 rejection. The subsequent appeal filed on 08/27/2009 deleted claims 10, 11-18, 26-33 and 35-42 to be reviewed on appeal as

specified in the previous appeal brief and Appellant's Representative further stated on the record that Appellant specifically chose not to address the outstanding 101 rejection of the claims 10-18.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2004/0236662 Korhammer et al. 05-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 101

1. *35 U.S.C. 101 reads as follows:*

> *Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.*

2. *Claims 10-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.*

Regarding claims 10-18, as best understood, it appears that the claimed method steps could simply be performed by mental process alone and are not statutory. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a

patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

4. Newly added Claims 25-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 25-42 represent improper dependent claims reciting both computer readable medium and system to carry out a method of claim as stated. Applicant fails to point out distinctly whether it is system or method claim and which steps of claim or whichever dependent claim it is dependent on is carrying out the method as described. Examiner interpreted claims 25-42 as a system claim for purposes of applying prior art in this application.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> *A person shall be entitled to a patent unless –*
>
> *(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

6. As per claim 1, Korhammer et al. teach a method comprising:

receiving a first order for a quantity of a trading product, in which the first order indicates a size of the first order that may be disclosed ((see Fig. 2; DELL (1080), Total Quantity (1010), Maximum disclosure Quantity or Show (1040); paragraph [0052])

identifying a plurality of market centers, in which each market center comprises a second order that corresponds to the first order (see Fig. 1; paragraph [0046); where Consolidated Computer System (CCS) 100 collects orders from ECN150, ECN251, ECN353 and ECN454 and NASDAQ52) and distributes to the trader) ;

determining a disclosure policy adopted by each identified market center (see Fig. 1; paragraph [0047]; where customized order book on the trader terminal organized by security and price disclosing each market center and its information);

selecting, based on the disclosure policy, a market center from the plurality of identified market centers (see Fig. 1; paragraph [0047-0048]; where trader selects or make buy/sell decision after filtering and customizing data displayed based on trading preferences); and

routing the first order to the particular selected market center, in which the first order is routed according to the disclosure policy selected market center (see Fig. 1; Fig. 2, Route (1020); where CCS routes the order to specific market center parameters indicate by the trader).

7. As per claim 11, Korhammer et al. teach claim 10 as described above. Korhammer et al. further teach the method further comprising:

determining that the selected market center has adopted a proprietary reserve policy, in which the selected market center fills the quantity of the first order, while disclosing only the size of the first order; and transmitting an indication of the quantity of the trading product and the size of the first order that may be disclosed (see paragraph [0034]; where user A and user B maintains hidden reserve policy in transaction with NASDAQ).

8. As per claim 12, Korhammer et al. teach claim 10 as described above. Korhammer et al. further teach the method further comprising:

determining that the selected market center indicates has adopted an IOC policy (see Fig. 2; paragraph [0055]; where Time in Force (TIF) is selected as Immediate or Cancel); and

transmitting an IOC order to the selected market center, in which the selected market center attempts to fill the quantity of the first order and cancels any portion of the first order that is unfilled(see Fig. 2; when TIF selected is Immediate or Cancel; paragraph [0055] and [0063]).

9. As per claim 13, Korhammer et al. teach claim 12 as described above. Korhammer et al. further teach the method further comprising:

receiving an indication that the selected market center filled only a attempts to fill immediately and cancels any portion of the first order (see paragraph [0055]; where order is order is Immediate or cancel);

comparing an amount of the remaining portion of the first order and the size of the first order that may be disclosed; determining that size of the first order is less than the amount of the remaining portion of the first order; and transmitting a day order for the size of the first order, in which the day order comprises that remains available on the selected market center for the lesser of the until at least one of the following occurs: the day order is filled, the day order is cancelled, and trading at the selected market center is closed (see paragraph [0034]; where first order for 1000 shares is disclosed out of 20,000 shares for NASDAQ market).

10. As per claim 14, Korhammer et al. teach claim 13 as described above. Korhammer et al. further teach the method comprising:

receiving an indication that the day order has been filled; determining the amount of the remaining portion of the first order: and transmitting a second IOC order comprising the amount of the remaining portion of the first order (see Fig. 2; paragraph [0059]).

11. As per claim 15, Korhammer et al. teach claim 10 as described above. Korhammer et al. further teach the method comprising:

receiving an indication that the selected market center filled only a portion of the first order; comparing an amount of the remaining portion of the first order and the size of the first order that may be disclosed; determining that size of the first order is greater than the amount of the remaining portion of the first order; and transmitting a day order for the amount of the remaining portion of the first order, in which the day order remains available on the selected market center until at least one of the following occurs: the day order is filled, the day order is cancelled, and trading at the selected market center is closed at end of day (see paragraph [0049]; where CCS breaks and routs order to more than one market center).

12. As per claim 16, Korhammer et al. teach claim 15 as described above. Korhammer et al. further teach the method comprising:

receiving an indication that the day order has been filled; determining the amount of the remaining portion of the first order; and transmitting a second IOC order comprising the amount of the remaining portion of the first order (see Fig. 2; paragraph [0055]).

13. As per claim 17, Korhammer et al. teach claim 10 as described above. Korhammer et al. further teach the method comprising:

determining that the selected market center has adopted a NOIOC policy; and

transmitting a day order for the size of the first order, in which the day order remains available on the selected market center until at least one of the following occurs: the day order is filled, the day order is cancelled, and trading at the selected

market center is closed at end of day (see Fig. 2; paragraph [0056] and [0057]; where bids at or above minimum price 24.04 is accepted until offer of 10,000 shares are filled).

14. As per claim 18, Korhammer et al. teach claim 17 as described above. Korhammer et al. further teach the method comprising:

receiving an indication that the day order has been filled; determining an amount of the remaining portion of the first order; determining that the amount of the remaining portion of the first order is greater than the size of the first order; and transmitting a second day order for the size of the first order (see Fig. 2; paragraph 0059]; where offer for 1000 shares are refreshed from the reserved quantity as previous offer of 1000 shares are sold in ColorBook Discretion Order).

15. As per claim 25-33, Korhammer et al. teach an apparatus (see Fig. 1) comprising:

a processor ; and a memory (see Fig. 1; paragraph [0046] and [0049]; where Consolidated Computer System (CCS) processes and routes order), in which the memory stores instructions which, when executed by the processor, direct the processor to perform the method of claim 10-18 as described above.

16. As per claim 34-42, Korhammer et al. teach an article of manufacture comprising:

a storage medium, in which storage medium stores instructions which, when executed by a processor, direct the processor to perform the method of claim 10 -18 as described above (see Fig. 3, Messaging System 100'; paragraphs [0015], [0023], [0066]

and [0049]; where plurality of users send messages/instructions to CCS (server) to execute an order which is stored in messaging system of CCS (100')).

(10) Response to Argument

A. *The appellant filed appeal brief on 05/22/2009 without addressing rejection of claims 10-18 under 35 U.S.C. 101 in the Final Rejection mailed on 07/22/2009. Examiner issued Notification of Non-Compliant Appeal Brief to the appellant on 07/29/2009 with request to address the impending 101 rejection. The subsequent appeal brief filed on 08/27/2009 deleted claims 10, 11-18, 26-33 and 35-42 to be reviewed on appeal as specified in the previous appeal brief and Appellant further chose not to address the 101 rejection of the claims 10-18. Examiner maintains U.S.C. 101 rejection for the claims 10-18 as described below:*

B. **No *Prima Facie* Case of Indefiniteness**

Newly added Claims 25-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's arguments, filed with appeal briefs, with respect to the rejection(s) of claim(s) 25-42 under 35 U.S.C. 112, second paragraph have been fully considered and are not persuasive.

The newly added claims create confusion since the claims are directed to a system claim or a computer readable claim yet refer back to a and incorporate steps of a method claim. Is the claim dependent on the method claim. Appelant argues that the claim, even though it refers back to another independent claim of a different stutory class is an accepted way of drafting claims. The Examiner cannot determine whether the newly added claims are directed to a system, a computer readable medium, or should they be method claims (since they refer back to a method claim). In addition, it is unclear which particular steps of the method claim are incorporated into newly added claims 25-42. One of the steps of the method? Two of the steps? Some of the steps? Most of the steps? All of the steps? With this type of claim construct as advanced by Appelant, it is unclear what the scope of each of claims 25-42 encompass.

C. **No *Prima Facie* case of Anticipation**

I. Rejection of independent claims 25 and 34 under 35 U.S.C. 102 (e) as unpatentable by Korhammer et al. (U.S. Pub. No. 2004/0236662).

Followings are the arguments of the appellant against the Korhammer et al. used by the Examiner for rejection of above claims in the instant application:

With respect to independent claims 25 and 34, the Examiner appears to have misunderstood the language of the claims, which recite, inter alia, "determining a disclosure adopted by each identified market center". In his rejection, the Examiner argues that Korhammer teaches this limitation because: "where customized order book on the trader terminal organized by security and price disclosing each market center and its information." This argument advanced by the Examiner bears no relationship,

whatsoever, to "determining a disclosure policy adopted by each identified market center".

In response to appellant's argument, Examiner respectfully disagrees that Korhammer et al. do not teach "determining a disclosure adopted by each identified market center" and argument cited in the final rejection bears no relationship. Korhammer et al. teach customized order is displayed on the user terminal 101 (see Fig. 1) as entered in the "Lava Order Launcher" illustrated in Fig. 2, where the user makes many choices in large numbers of fields in terms of security, route, quantity, Execution Instructions (ECN's Only...) etc. as described in paragraphs [0052-0055].

The disclosed policy is set forth in terms of quantity and price of different market center (ECN/Market Maker) at the time the order was entered for a sweep order(see paragraph [0056]) shown in Table 1, Paragraph [0056]) which allows CCS 100/ trader to compare / evaluate information of all ECN and NASDAQ market makers and determine the highest current bid which is 24.05. If the order to fill is selling 10,000 shares for price $24.02 plus 0.02 (Filed 1140), CCS 100 routes the order by selecting 1000 shares of MLCO, 2000 shares of GSCO, and 5000 shares of ISLD for a total of 8000 shares at $24.05 price level. Since there is not enough to fill the 10, 000 share order, CCS 100 moves on to the $24.04 price level and selects to fill 1000 shares from the market center ARCA. CCS 100 will not fill market center FBCO for disclosed bid of 3000 shares at $24.03 price level as it is below the minimum sweep price specified in sweep order filled in the "Lava Order Launcher" (see paragraph [0057]). In this respect, Korhammer et al. teach determining a disclosure policy adopted by each market center

in terms of quantity and price of specific security, and selecting and routing of the order to specific market center according to the disclosure policy of the market center.

II. Rejection of dependent claims 28 and 37 under 35 U.S.C. 102 (e) as unpatentable by Korhammer et al. (U.S. Pub. No. 2004/0236662).

Followings are the arguments of the appellant against the Korhammer et al. used by the Examiner for rejection of above claims in the instant application:

Korhammer fails to teach or suggest "comparing an amount of the remaining portion of the first order and the size of the first order that may be disclosed" and "determining that [the] size of the first order is less than the amount of the remaining portion of the first order." There is no discussion, whatsoever, of "comparing" the remaining portion of a first order with the disclosure size of the first order. Nor is there any discussion of "determining" that the disclosure size is less than the remaining portion of the first order.

In response to above arguments, Examiner respectfully disagrees that Korhammer fails to teach comparing an amount of the remaining portion of the first order and the size of the first order that may be disclosed" and "determining that [the] size of the first order is less than the amount of the remaining portion of the first order. Korhammer et al. teach sweep order, where limit price and quantity to be bought is specified (see paragraph [0055]). An example of a sweep order and its execution has been illustrated in Table 1 and paragraph {0056-0057]. In this example, CCS 100 (see Fig. 1) compares sell order (first order) of 10,000 for price level of $24.02 plus 0.02 with

available bids from plurality of market center in terms of quantity and price. Here, CCS 100 continuously compares available bids and remaining portion of the sell order and select market center that meet the requirement of the sell order. If the order to fill is selling 10,000 shares for price $24.02 plus 0.02 (Filed 1140), CCS 100 routes the order by selecting 1000 shares of MLCO, 2000 shares of GSCO, and 5000 shares of ISLD for a total of 8000 shares at $24.05 price level. Since there is not enough to fill the 10, 000 share order, CCS 100 moves on to the $24.04 price level and selects to fill 1000 shares from the market center ARCA. CCS 100 will not fill market center FBCO for disclosed bid of 3000 shares at $24.03 price level as it is below the minimum sweep price specified in sweep order filled in the "Lava Order Launcher" (see paragraph [0057]).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted.

/Bijendra K. Shrestha/

Patent Examiner

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